WHAT IS CLAIMED IS:

1. A communication network comprising:

a multiplexer located in a building having a plurality of units, wherein said
multiplexer is coupled to said plurality of units via a local
communication link; and

a switch coupled to said multiplexer via a synchronous optical network
(SONET), for routing one or more communication packets between
said multiplexer and a plurality of communication service providers,

wherein said plurality of units can transmit and receive said one or more
communication packets to and from said plurality of communication
service providers via said multiplexer.

2. The communication network of claim 1, wherein said multiplexer
comprises a digital subscriber loop access multiplexer (DSLAM).

3. The communication network of claim 1, wherein said switch comprises an
asynchronous transfer mode (ATM) switch.

4. The communication network of claim 1,

wherein said plurality of communication service providers comprise a public
switched telephone network (PSTN), and

wherein said communication network further comprises a gateway between
said switch and said PSTN for converting between a packetized voice
over digital subscriber loop (DSL) signal for said switch and a standard
telephone voice signal for said PSTN.

5. The communication network of claim 1,

wherein said one or more communication packets comprises a voice packet
and a data packet, and

wherein said communication network further comprises a device between said multiplexer and a member of said plurality of units, for transmitting and receiving said voice packet and said data packet to and from said member via said local communication link.

6. The communication network of claim 5, wherein said device supports a plurality of voice circuits and a data circuit for said member by dynamically allocating bandwidth to said plurality of voice circuits.

7. The communication network of claim 1, wherein said multiplexer interfaces with a symmetric digital subscriber loop modem for a member of said plurality of units.

8. The communication network of claim 1, further comprising a backup power source connected to said multiplexer for supplying power to said multiplexer.

9. A communication network comprising:
a digital subscriber loop access multiplexer (DSLAM) located in a building having a plurality of units, wherein said DSLAM is coupled to said plurality of units via a wiring harness;
a gateway coupled to a public service telephone network (PSTN) for converting between a packetized voice over digital subscriber loop (DSL) signal and a standard telephone voice signal for said PSTN; and
an asynchronous transfer mode (ATM) switch coupled to said DSLAM via a synchronous optical network (SONET), for transmitting and receiving packetized voice over DSL signals to and from said gateway and for transmitting and receiving data packets to and from an Internet service provider,
wherein said plurality of units can transmit and receive said packetized voice over DSL signals and said data packets via said DSLAM.

10. The communication network of claim 9, further comprising a device between said DSLAM and a member of said plurality of units, for transmitting and receiving said packetized voice over DSL signals and said data packets to and from said member via a pair of wires in said wiring harness.

11. The communication network of claim 9, further comprising a backup power source connected to said multiplexer for providing power to said multiplexer.

12. A method for providing communication services, comprising:
locating a multiplexer in a building having a plurality of units, wherein said
    multiplexer is coupled to said plurality of units via a local
    communication link; and
coupling a switch to said multiplexer via a synchronous optical network
    (SONET), for routing one or more communication packets between
    said multiplexer and a plurality of communication service providers,
wherein said plurality of units can transmit and receive said one or more
    communication packets to and from said plurality of communication
    service providers via said multiplexer.

13. The method of claim 12, wherein said multiplexer comprises a digital subscriber loop access multiplexer (DSLAM).

14. The method of claim 12, wherein said switch comprises an asynchronous transfer mode (ATM) switch.

15. The method of claim 12,
wherein said plurality of communication service providers comprise a public
    switched telephone network (PSTN), and

15

wherein said method further comprises positioning a gateway between said switch and said PSTN for converting between a packetized voice over digital subscriber loop (DSL) signal for said switch and a standard telephone voice signal for said PSTN.

16. The method of claim 12,

wherein said one or more communication packets comprises a voice packet and a data packet, and

wherein said method further comprises positioning a device between said multiplexer and a member of said plurality of units, for transmitting and receiving said voice packet and said data packet to and from said member via a pair of wires in said local communication link.

17. The method of claim 16, wherein said device supports a plurality of voice circuits and a data circuit for said member by dynamically allocating bandwidth to said plurality of voice circuits.

18. The method of claim 12, wherein said multiplexer interfaces with a symmetric digital subscriber loop modem for a member of said plurality of units.

19. The method of claim 12, further comprising connecting a backup power source to said multiplexer for supplying power to said multiplexer.

20. A method for providing communication services, comprising:

locating a digital subscriber loop access multiplexer (DSLAM) in a building having a plurality of units, wherein said DSLAM is coupled to said plurality of units via a wiring harness;

coupling a gateway to a public service telephone network (PSTN) for converting between a packetized voice over digital subscriber loop (DSL) signal and a standard telephone voice signal for said PSTN; and

16

coupling an asynchronous transfer mode (ATM) switch to said DSLAM via a synchronous optical network (SONET), for transmitting and receiving packetized voice over DSL signals to and from said gateway and for transmitting and receiving data packets to and from an Internet service provider,

wherein said plurality of units can transmit and receive said packetized voice over DSL signals and said data packets via said DSLAM.

21. The method of claim 20, further comprising positioning a device between said DSLAM and a member of said plurality of units, for transmitting and receiving said packetized voice over DSL signals and said data packets to and from said member via said wiring harness.

22. The method of claim 20, further comprising connecting a backup power source to said DSLAM for providing power to said DSLAM.

17